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IBM CORPORATION  
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EXAMINER
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KARDOS, NEIL R

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1 UNITED STATES PATENT AND TRADEMARK OFFICE

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4 BEFORE THE BOARD OF PATENT APPEALS  
5 AND INTERFERENCES  
6

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8 *Ex parte* CHRISTOPHER N. KLINE  
9

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11 Appeal 2009-012273  
12 Application 10/635,397  
13 Technology Center 3600  
14

15  
16 Before HUBERT C. LORIN, ANTON W. FETTING, and  
17 BIBHU R. MOHANTY, *Administrative Patent Judges*.  
18 FETTING, *Administrative Patent Judge*.

19 DECISION ON APPEAL<sup>1</sup>

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE<sup>2</sup>

Christopher N. Kline (Appellant) seeks review under 35 U.S.C. § 134 (2002) of a final rejection of claims 1, 5-8, 11-14, 18-21, 24-26, and 28, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

The Appellant invented a way of determining when to run maintenance operations based on predetermined system criteria (Specification 4:8-9).

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below [bracketed matter and some paragraphing added].

1. A method for automatically scheduling performance of maintenance tasks to maintain at least one server in a distributed computing environment, comprising:

[1] providing a distributed computing environment with a plurality of servers, including said at least one server;

[2] monitoring server conditions on said at least one server

to dynamically detect at least one predetermined criterion

for performing at least one maintenance task

on said at least one server

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<sup>2</sup> Our decision will make reference to the Appellant's Appeal Brief ("App. Br.," filed December 9, 2008) and the Examiner's Answer ("Ans.," mailed March 10, 2009).

1                   in said distributed computing environment; and  
2           [3] automatically performing said at least one maintenance task  
3           in response to said monitoring step,  
4           wherein said at least one predetermined criterion  
5           comprises  
6                   low disk space on said at least one server, and  
7           wherein said at least one maintenance task comprises  
8                   reducing a size of log files  
9                   stored on said at least one server  
10           in said distributed computing environment.

11       The Examiner relies upon the following prior art:

12       McAfee, McAfee Utilities: User's Guide Version 4.0 (Jan. 2001)  
13       (McAfee)

14       *Description of the Low Disk Space Notification in Windows XP*  
15       <http://support.microsoft.com/kb/285107> (Hereafter, Disk Space)

16       *How to Automate the Disk Cleanup Tool in Windows XP,*  
17       <http://support.microsoft.com/kb/315246> (last visited Jan.4, 2008)  
18       (Hereafter, Disk Cleanup)

19       *How to Use the Backup Utility to Back Up Files and Folders in Windows*  
20       *XP Home Edition,* [http://support.microsoft.com/kb/ 320820/en-us](http://support.microsoft.com/kb/320820/en-us) (last  
21       visited Jan.4, 2008) (Hereafter, Backup)

22       *Disk Defragmenter Error Codes,* [http://www.aumha.org/a/](http://www.aumha.org/a/defragerr.php)  
23       [defragerr.php](http://www.aumha.org/a/defragerr.php), (last visited Jan.4, 2008) (Hereafter, Error Codes)

24       Claims 1, 5-6, 8, 12-14, 18, 19, 21, 25, 26, and 28 stand rejected under  
25       35 U.S.C. § 103(a) as unpatentable over McAfee, Disk Space, and Disk  
26       Cleanup.

27       Claims 7 and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable  
28       over McAfee, Disk Space, Disk Cleanup, and Backup.

1 Claims 11 and 24 stand rejected under 35 U.S.C. § 103(a) as  
2 unpatentable over McAfee, Disk Space, Disk Cleanup, and Error Codes.

3 ISSUES

4 The issue of obviousness turns primarily on whether it was predictable to  
5 operate various housekeeping utilities for disk space conservation and  
6 backup on a server as well as on stand alone or client computers. The issue  
7 also turns on predictability of automating a known process and whether file  
8 compression reduces the size of log files.

9 FACTS PERTINENT TO THE ISSUES

10 The following enumerated Findings of Fact (FF) are believed to be  
11 supported by a preponderance of the evidence.

12 *Facts Related to the Prior Art*

13 *McAfee*

14 01. McAfee is a software utilities user guide. McAfee Cover.

15 02. McAfee deletes and compresses those types of files one  
16 specifies. McAfee 33.

17 03. McAfee's utilities can be placed on a server in a client server  
18 network environment. McAfee iii.

19 *Disk Space*

20 04. Disk Space is directed to a Microsoft Disk Cleanup Wizard  
21 utility that starts automatically when a user responds to an  
22 automatically created Low Disk Space prompt when disk space  
23 runs low. Disk Space 1.

*Disk Cleanup*

05. Disk Cleanup is directed to explaining the settings for  
Microsoft Disk Cleanup Wizard. Disk Cleanup 1-3.

06. Among the options is that of compressing files to reduce size.  
Cleanup 2.

*Backup*

07. Backup is directed to a Microsoft backup utility that copies data  
files and system state settings. Backup 1-2.

08. You can only back up the System State data on a local  
computer. You cannot back up the System State data on a remote  
computer. That is, although the resulting backup data is stored  
elsewhere, the system state data that is backed up is only that of  
the local machine. Microsoft's particular backup utility will not  
retrieve the system state settings from a remote machine. Backup  
3.

ANALYSIS

*Claims 1, 5-6, 8, 12-14, 18, 19, 21, 25, 26, and 28 rejected under 35 U.S.C.  
§ 103(a) as unpatentable over McAfee, Disk Space, and Disk Cleanup.*

Claim 1 is representative. A server in a distributed computing  
environment is monitored for low disk space, and when this criterion is met,  
the size of log files is automatically reduced. The Appellant argues that the  
art fails to describe the server in a distributed computing environment,  
automated execution, and reducing the size of log files. Appeal Br. 8-15;  
Reply Br. 1-4.

1 The Examiner found that McAfee provided the distributed computing  
2 environment and monitoring with maintenance tasks; and Disk Space  
3 described a low disk space monitor as a specific type of monitoring that was  
4 known to be required; and that Disk Cleanup described reducing file sizes  
5 generally, which would have included log files. Ans. 4-6.

6 McAfee explicitly recites loading its software on a server in a client-  
7 server network environment. FF 03. The Appellant appears to be arguing  
8 that this is for storage only and that the software is actually executed on  
9 clients. As the cited portion of McAfee is a licensing provision rather than  
10 operating instructions, McAfee is silent as to whether execution occurs on  
11 the server. But as a server is simply another computer of the type that  
12 McAfee monitors, it was at least predictable to one of ordinary skill to run  
13 utilities such as those in McAfee on such a server.

14 The Appellant does not contend otherwise, but merely argue the scope of  
15 the licensing terms. The Examiner applied McAfee only to show that  
16 monitoring software was known to be placed on a server in a distributed  
17 computing environment. One of ordinary skill would have operated the  
18 software to monitor any computer that exhibited the need for such utilities.  
19 A server clearly requires disk cleanup by deleting and compressing files (FF  
20 02) given the amount of data traffic that creates temporary storage files.

21 The Appellant also argues that the Examiner misstated as fact that  
22 McAfee describes a server in a distributed computing environment. Appeal  
23 Br. 16. McAfee's referral to a server that contains a program that is run on a  
24 client computer (FF 03) describes a server in a client-server environment. A

1 client-server relationship is in fact a distributed computing environment, as  
2 the operation is shared, or distributed, between the client and the server.

3 As to automation, Microsoft's cleanup wizard starts automatically when  
4 a user responds to, an automatically created, a Low Disk Space prompt when  
5 disk space runs low. FF 04. Thus the cleanup wizard is one that was  
6 "automatically performing said at least one maintenance task in response to  
7 said monitoring step." The claim makes no further limitation regarding the  
8 nature of the automation, so even the automated triggering of the cleanup as  
9 in the cleanup wizard is within the scope of the claim. In any event, as the  
10 Examiner found, it is obvious to automate a known manual operation where  
11 one of ordinary skill knew how to provide such automation. *See Leapfrog*  
12 *Enterprises Inc. v. Fisher-Price Inc.*, 485 F.3d 1157, 1163 (Fed. Cir. 2007).

13 As to reducing log files, both McAfee and the cleanup wizard compress  
14 files (FF 02 and 06) to reduce file size and log files being text files  
15 invariably exhibit size reduction under such compression. The claim does  
16 not restrict the scope to only log files, so general compression as in McAfee  
17 and the cleanup wizard is within the scope of the claim, as servers invariably  
18 produce log files documenting transaction history.

19 The remaining claims are argued either by referring to the arguments in  
20 support of claim 1 or by essentially repeating those arguments.

21 *Claims 7 and 20 rejected under 35 U.S.C. § 103(a) as unpatentable over*  
22 *McAfee, Disk Space, Disk Cleanup, and Backup.*

23 These claims recite automatically saving configurations and  
24 authorizations for instances of applications running on said at least one  
25 server in said distributed computing environment. The Appellant argues that



1 Backup only saves system state settings for the same computer that backup  
2 is performed and so does not save configurations for instances of  
3 applications running on the server. We find this argument to be a corollary  
4 to the argument with claim 1 regarding the server. This argument implies  
5 the backup utility is not running on a server, since a backup utility running  
6 on a server would be running on the same machine as the instances of  
7 applications running on that same server. As we found in claim 1, *supra*, it  
8 was predictable to run such utilities on a server, as a server produces the  
9 same or greater risk of disk degradation as any other computer.

10 *Claims 11 and 24 rejected under 35 U.S.C. § 103(a) as unpatentable over*  
11 *McAfee, Disk Space, Disk Cleanup, and Error Codes .*

12 These claims recite automatically alerting an administrator when a  
13 maintenance task performed on said at least one server in said distributed  
14 computing environment fails. The Appellant repeats the argument regarding  
15 a server and distributed computing environment from claim 1, which we find  
16 unpersuasive for the same reasons as found *supra*.

## 17 CONCLUSIONS OF LAW

18 Rejecting claims 1, 5-6, 8, 12-14, 18, 19, 21, 25, 26, and 28 under 35  
19 U.S.C. § 103(a) as unpatentable over McAfee, Disk Space, and Disk  
20 Cleanup is not in error.

21 Rejecting claims 7 and 20 under 35 U.S.C. § 103(a) as unpatentable over  
22 McAfee, Disk Space, Disk Cleanup, and Backup is not in error.

23 Rejecting claims 11 and 24 under 35 U.S.C. § 103(a) as unpatentable  
24 over McAfee, Disk Space, Disk Cleanup, and Error Codes is not in error.

DECISION

To summarize, our decision is as follows.

- The rejection of claims 1, 5-6, 8, 12-14, 18, 19, 21, 25, 26, and 28 under 35 U.S.C. § 103(a) as unpatentable over McAfee, Disk Space, and Disk Cleanup is sustained.
- The rejection of claims 7 and 20 under 35 U.S.C. § 103(a) as unpatentable over McAfee, Disk Space, Disk Cleanup, and Backup is sustained.
- The rejection of claims 11 and 24 under 35 U.S.C. § 103(a) as unpatentable over McAfee, Disk Space, Disk Cleanup, and Error Codes is sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

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Address

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Appeal 2009-012273  
Application 10/635,397

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